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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,852	04/21/2000	Charles A. Lieder	013129/00025	6369

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,852

Applicant(s)

LIEDER ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the Appeal Brief filed March 3, 2006. The examiner has reopened prosecution to address Applicant's concerns that the examiner had not addressed the conclusions reached by Dr. Lieder, i.e., that Jarvis teaches a reaction product and not a blend.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 17, 18, 26, 30, 34, 38 and their dependents are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification for the limitation for an alcohol content "less than or equal to 10 volume percent" (claims 1, 17 and 26). There is no support in the specification for "the benzene content of the blend is greater than 0.27 volume percent" (claim 18); "the aromatic content of the blend is greater than 16.76 volume percent" (claim 30); "the olefin content of the blend is greater than 1.15 volume percent" (claim 34) and "a Dry Vapor Pressure Equivalent greater than or equal to 5.3 PSI" (claim 38).

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3. Applicant argues that the language “less than or equal to 10 volume percent” is supported by the data presented in Table 8 of the specification.

The examiner respectfully disagrees. Table 8 provides for 5.42 and 9.5-81 volume percent alcohol. There are no proportions listed that are greater than 9.81. Table 13 provides for up to 9.91 %. Therefore, Applicant does not have support for 9.92-10%.

Applicant argues that the support for the limitations “benzene content of the blend is greater than 0.27 volume percent” may be found in Table 10.

The language “greater than 0.27 volume percent” is open to an unlimited amount of benzene. The present specification does not support unlimited benzene. The same argument may be made for the language “the aromatic content of the blend is greater than 16.76 volume percent”; “the olefin content of the blend is greater than 1.15 volume percent” and “a Dry Vapor Pressure Equivalent greater than or equal to 5.3 psi.”

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-10, 13-18 and 21-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Jarvis (US 5,679,117).

Jarvis teaches a process of producing high-octane hydrocarbons wherein a mixture of ethanol and butane, natural gasoline or low octane gasoline is taken through a series of process steps (see abstract). Jarvis teaches that the final liquid product possesses a RON of 120-160, MON of 110-129 and R+M/2 of 148. The final product contains 42.75% ethanol and <0.1% MTBE (see col. 5, lines 3-17). To produce the final high octane gasoline Jarvis adds 20% of the final liquid product to 80 octane gasoline and the resulting mixture is 92.8 octane with a vapor pressure in the range of 4 to 19 psi (see col. 5, lines 25-28). When Jarvis takes the mixture of 1/3 ethanol and 2/4 natural gasoline through his process, the resulting product is substantially one half natural gasoline and one half ethanol, wherein the vapor pressure of the product is 1.5-8 psi and the octane rating is 108 to 160. Jarvis discusses other examples wherein his final product contains ethanol and has a vapor pressure of 6 to 8 psi (see col. 6, lines 1-28).

While Jarvis does not specifically discuss that his final composition reduces toxic air pollutants emissions, he would inherently meet this limitations because he teaches the same fuel composition as Applicant.

Accordingly, Jarvis teaching all the limitations of the claims, anticipates the claims.

4. Applicant's arguments have been fully considered but they are not persuasive.
5. Applicant argues that Jarvis does not disclose the alcohol content of the final product.

The examiner respectfully disagrees. Jarvis teaches at col. 5, lines 3-17 that the final product contains 42.75 vol. % ethanol. Jarvis takes 20% of the final product and

dilutes it with 80 octane gasoline to obtain a composition possessing a vapor pressure in the range of 4 to 19 psi. Therefore, Jarvis teaches an amount of alcohol that is within the claimed range.

Applicant argues that Jarvis fails to teach a blend of gasoline and oxygenate because Jarvis teaches a reaction product.

While it is true that Jarvis discloses the use of a catalyst, catalyzing chamber, characterizes his product as being derived from a catalyzed mixture and sets forth conditions characteristic of chemical reactions, it is clear from the teachings of Jarvis that the final product is a mixture of alcohol and hydrocarbon. The examiner agrees that Jarvis sets forth a chemical reaction; however, as shown in the Table at col. 5, the final product contains hydrocarbons (gasoline) and ethanol. This final product is clearly a blend of oxygenate and gasoline.

Applicant argues that claims 5-6 and 14 are not anticipated by Jarvis because Jarvis does not address the need for reducing toxic air pollutants emissions.

Jarvis teaches the same composition as that set forth in the present invention. Therefore, Jarvis would inherently meet the limitations regarding reducing toxic air pollutants emissions.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cepha D. Toomer
Primary Examiner
Art Unit 1714

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